

Appl. No. 09/730,873
Amdt. Dated January 13, 2004
Reply to Office action of October 3, 2003
Attorney Docket No. P11901-US1
EUS/J/P/04-3006

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

B2 1. (Currently Amended) Method for a fast performance of network operations via a network having high delay times by means of a module for processing a system call of an application layer and for initiating network operations of a network layer, comprising: with the following steps:

transmission of the system call to the module,

determination of an execution mode of the system call by differentiating between a blocking and a non-blocking execution mode, and

direct return of a logical value to the application layer and initiation of a network operation in the case of a non-blocking performance execution mode.

2. (Original) Method according to claim 1, wherein the network operation is transmitted to a partner instance communicating with a unit initiating the network operation.

3. (Original) Method according to claim 2, wherein the network operation received in the partner instance is converted into an operation, which is performed, and wherein a result of the operation is returned to the unit that initiated the network operation.

4. (Previously Presented) Method according to claim 3, wherein a processing of the received result of an operation is realized in the module.

5. (Currently Amended) Method according to claim 1, wherein, upon the initiation of the network operation a ~~non-blocking~~ blocking system call is interpreted by the module as a non-blocking system call converted into a state, in which an actual result of the system call executed in a partner instance is awaited, without blocking the execution of the calling application.

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6. (Currently Amended) Method according to claim 3, wherein the received results ~~refer to~~ indicate a non-blocking state and have a logical value, or are a result of a blocking system call interpreted by the module as a non-blocking system call and executed in the partner instance.

7. (Previously Presented) Method according to claim 3, wherein the received results with a non-blocking execution mode are buffered.

8. (Previously Presented) Method according to claim 1, wherein the logical values either have a logical positive or a logical negative propositional value.

9. (Original) Method according claim 8, wherein the logical negative results are reported to the application with the execution of the following system call in the form of a logical negative return value.

10. (Previously Presented) Method according to claim 3, wherein, with a non-blocking system call, in the case of non-pending negative results of previous calls a logical positive value is returned to the application.

11. (Previously Presented) Method according to claim 1, wherein the last system call of a connection is set into a blocking state in order to guarantee a return report of the results of the previously performed operations.

12. (Previously Presented) Method according to claim 1, wherein blocking system calls are realized by waiting for the result of the system call executed in the partner instance.

13. (Previously Presented) Method according to claim 1, wherein the system calls are socket system calls.

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14. (Original) Method according to claim 13, wherein the socket system calls form a programming interface for an operating system.

15. (Original) Method according to claim 1, wherein the module is a pipeline module.

16. (Currently Amended) An apparatus ~~Device~~ for a fast performance of network operations via a network having high delay times by means of a module for processing system calls of an application layer and for initiating network operations of a network layer, with

a determining element for determining the execution mode of a system call,
converting means for converting the system call into network operations,
a sender for sending network operations,
a receiver for receiving results of the network operations,
a memory for storing received results, and
a processing element for processing the received results.

17. (Currently Amended) An apparatus ~~Device~~ according to claim 16 further comprising elements for realizing a state, in which the result of the system call executed in a partner instance is awaited once the network operation is initiated, without blocking the execution of the calling application.

18. (Currently Amended) An apparatus ~~Device~~ according to claim 16, wherein the means for processing the received results differentiates between negative and positive values.